

L 8492-65 EWT(m)/EPF(c)/EPR/EWP(j)/T/H Ps-4/Pr-4/Ps-4 ASD(m)-3/RPL
WW/JWD/MLK/RM

ACCESSION NR: AT4033980

S/0000/63/000/000/0018/0023

AUTHOR: Andrianov, K.A., Leonosov, A.V., Mil'gotin, I.M., Khananashvili, L.M.,
Shapatin, A.S.

TITLE: Synthesis of polydimethylsiloxanes and silicoorganic polyurethanes with a
cycloreticular molecular structure

SOURCE: Geterotsepnny*ye vy*sokomolekulyarny*ye soyedineniya (Heterochain Macro-
molecular compounds); sbornik statey. Moscow, Izd-vo "Nauka," 1963, 18-23

TOPIC TAGS: siloxane, silane, crosslinked siloxane, polyurethane, silicoorganic
polyurethane, polymer, crosslinked polymer, polydimethylsiloxane, glycoxysilane,
elastic polymer, thermostable polymer

ABSTRACT: Six crosslike compounds of the dimethylsiloxane and glycoxysilane series,
containing hydroxyl groups at the chain ends, were synthesized (see Table 1 in the
Enclosure). The dimethylsiloxane oligomers were synthesized by cleavage of octamethyl-
cyclotetrasiloxane under the influence of KOH, reaction of the potassium salt of di-
methylsiloxane obtained with silicon tetrachloride, and conversion of the reaction product
to the hydroxy derivative with acetic acid, while the glycoxysilanes were synthesized by
transesterification of tetraethoxysilane or phenyltriethoxysilane with glycols. The

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physical properties of these compounds were then investigated. By condensation of crosslike oligomers of the dimethylsiloxane series with phenylmethyl dichlorosilane, crosslinked and noncrosslinked elastic polymers were synthesized with a very low (-120C) glass transition temperature. Silicoorganic polyurethanes with a cycloreticular molecular structure, stable to 300C, were obtained in a series of reactions of glycoxyllanes with diisocyanates. The experimental conditions and procedures are described in detail. Orig. art. has: 3 figures, 1 table and 5 chemical equations.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M.V. Lomonosova
(Moscow Institute of Fine Chemical Technology)

SUBMITTED: 05May62

ENCL: 01

SUB CODE: OC

NO REF SOV: 002

OTHER: 000

Card 2/3

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ENCLOSURE: 01

No	Compound	Formula	n_D^{20}	d_4^{20}	MRD	
					Experimental	Calculated
1	tetrakis-(octamethyl-tetrasiloxano-9-hydroxy) silane	$\begin{array}{c} \text{CH}_3 \\ \\ \text{Si}(\text{O}-\text{Si})_8\text{OH} \\ \\ \text{CH}_3 \end{array}$	1,4030	0,9394	316,1	315,3
2	tetrakis-(hexadecamethyl-octasiloxano-17-hydroxy) silane	$\begin{array}{c} \text{CH}_3 \\ \\ \text{Si}(\text{O}-\text{Si})_8\text{OH} \\ \\ \text{CH}_3 \end{array}$	1,4045	0,9798	615,9	615,3
3	tetrakis-(octatetracontamethyl-tetracosasiloxano-49-hydroxy) silane	$\begin{array}{c} \text{CH}_3 \\ \\ \text{Si}(\text{O}-\text{Si})_{16}\text{OH} \\ \\ \text{CH}_3 \end{array}$	1,4053	0,9703	1798,2	1797,4
4	tetrakis-(ethylene-glycoxy) silane	$\text{Si}(\text{OCH}_2\text{CH}_2\text{OH})_4$	1,4536	1,2842	58,50	58,04
5	tetrakis-(diethyl-glycoxy) silane	$\text{Si}(\text{OCH}_2\text{CH}_2\text{OCH}_2\text{CH}_2\text{OH})_4$	1,4840	1,2140	101,79	102,36
6	phenyl-tris-(ethylene-glycoxy) silane	$\text{C}_6\text{H}_5\text{Si}(\text{OCH}_2\text{CH}_2\text{OH})_3$	1,5045	1,2101	70,60	71,05

Card 3/3

ANDRIANOV, K.A.; MARFENKOVA, G.P.; KHANANASHVILI, L.M.; SHAPATIN, A.S.

Synthesis of organophosphinoxaluminoxanodimethylsiloxane
elastomers. Vysokom. soed. 5 no.10:1552-1557 0 '63.
(MIRA 17:1)

1. Institut tonkoy khimicheskoy tekhnologii imeni Lomonosova.

L 40978-65 EWT(m)/EPF(c)/EPR/EMP(j) Pc-4/Pr-4/Ps-4 RPL WH/RM
ACCESSION NR: AP5006422 S/0062/65/000/001/0187/0189

AUTHOR: Andrianov, K. A.; Shapatin, A. S.; Ponomarev, V. V.

TITLE: Formation reactions and properties of aluminum salts of ethoxymethylphos-
phinic and diethylphosphoric acids

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 1, 1965, 187-189

TOPIC TAGS: aluminum, aluminum compound, phosphonic acid, phosphoric acid, polymer

ABSTRACT: Aluminum diisopropoxy(ethoxymethylphosphinate), aluminum isopropoxy-bis-(ethoxymethylphosphinate), and aluminum tris-(ethoxymethylphosphinate) were synthesized. The interaction of aluminum isopropylate with triethylphosphate was studied in molar ratios of 1:1, 1:2, and 1:3. The reaction of aluminum isopropylate with ethyl ethers of methylphosphinic and phosphoric acids yields aluminum tris-(ethoxymethylphosphinate) and aluminum tris-(diethylphosphate). Aluminum isopropoxy-bis-(ethoxymethylphosphinate), and aluminum tris-(ethoxymethylphosphinate) have a polymeric structure. Orig. art. has: 1 figure, 4 equations.

Card 1/2

L 40978-65

ACCESSION NR: AP5006422

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M. V. Lomonosova (Moscow Institute of Fine Chemical Technology)

SUBMITTED: 03Jun64

ENCL: 00

SUB CODE: GC, OC

NO REF SOV: 002

OTHER: 000

llc
Card 2/2

L 14612-66 EWP(m)/T/EWP(j) WW/JW/EM
ACC NR: AP6001497 (A)

SOURCE CODE: UR/0191/65/000/012/0019/0021

AUTHORS: Shapatin, A. S.; Golubtsov, S. A.; Solov'yev, A. A.; Zhigach, A. F.; 37
Siryatskaya, V. N. B

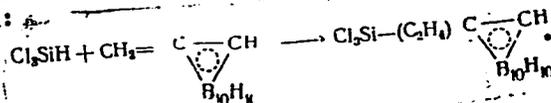
ORG: none

TITLE: Addition of hydrides of silicon chlorides to alkenyl carboranes 7.44.55

SOURCE: Plasticheskiye massy, no. 12, 1965, 19-21

TOPIC TAGS: silane; organic synthetic process, catalysis, silicon compound, catalyst, ferric chloride

ABSTRACT: A simplified method for synthesizing carborane siliconorganic monomers is offered. It consists of adding chlorosilicon hydrides to alkenyl carboranes, according to the equation:



The following reactions were studied: methylchlorosilane with carborane derivatives containing vinyl, isopropenyl, propenyl, or butenyl groups; trichlorosilane and dimethyl chlorosilane with vinyl and isopropenyl carborane; ethyl dichlorosilane and phenyldichlorosilane with isopropenylcarborane. Elementary analysis and UDC: 678.84

Card 1/2

2

L 11/612-66

ACC NR: AP6001497

physical properties of the resulting 10 compounds are reported. In the absence of the catalyst the reaction occurs only above 200C and results in very low yields. The yields increase to 80% and more, and the required temperatures are lowered by the addition of chloroplatinic acid or ferric chloride as catalysts. Orig. art. has: 2 tables and 1 equation.

SUB CODE: 07/ SUBM DATE: none/ ORIG REF: 001/ OTH REF: 004
///

JS
Card 2/2

I 23834-66

ACC NR: AP6007125

The course of reaction (2), characteristic of compounds containing chlorine in the β position relative to silicon, demonstrates the structure of compound (III). The presence of chlorine in (III) in the β position relative to phosphorus indicates in turn that the addition of the chloride (I) to the alkenylsilane (II) follows Markovnikov's rule. The authors thank B. I. Ionin for his participation in a discussion of the work. Orig. art. has: 2 formulas.

SUB CODE: 07/

SUBM DATE: 04Mar65/

ORIG REF: 001/

OTH REF: 002

Card 2/2 *fv*

1986-86 ENT(m)/ENP(j) RM
ACC NR: AP6030559 (A,N) SOURCE CODE: UR/0413/66/000/016/0033/0033

INVENTOR: Ponomarev, V. V.; Shapatin, A. S.; Golubtsov, S. A. 11
2

ORG: none

TITLE: Preparative method for silicon-containing organophosphorus
compounds. Class 12, No. 184856 ✓ 1

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 16,
1966, 33

TOPIC TAGS: *ORGANIC* phosphorus compound, silicon, alkylaryl silicon
derivative, phosphorus trichloride, *CHEMICAL REACTION*

ABSTRACT: An Author Certificate has been issued for a method for pre-
paring silicon-containing organophosphorus compounds of the general
formula $Cl_n R_n Si(R'PCl_2)_{4n-m}$, where $n = 0-3$, $m = 0-3$, R is a monovalent
alkyl or arylalkyl group, and R' is a bivalent alkylaryl group. The
method involves the reaction of alkylaryl silicon derivatives of the
 $R_n Cl_{3-n} Si(CH_2)_n C_6H_5$ type with PCl_3 in the presence of Friedel-Crafts
reaction catalysts, e.g. $AlCl_3$. [BO]

SUB CODE: 07/ SUBM DATE: 18May65/

Card 1/1 mjs UDC: 547.419.1'5.07

3-58-6-19/5A

AUTHOR: Shapatin, V.A., and Dobrovolskiy, N.S.

TITLE: We Have Begun to Work in Single Shifts (Nachali rabotat' v odnu smenu)

PERIODICAL: Vestnik Vysshey Shkoly, 1958, Nr 6, pp 74 - 76 (USSR)

ABSTRACT: Beginning with the 2nd semester of the 1957/58 school year, the Ural Polytechnical Institute imeni Kirov switched to one session instead of the former two. The principle problem to be solved under the new conditions was to work out a new instruction schedule. For this purpose the institute coordinated with the Moscow vuzes - the Energeticheskiy (Power Engineering) and Stanko-instrumental'nyy (Machine Tool Institutes), the Vyssheye tekhnicheskoye uchilishche (Higher Technical School), and the Leningradskiye politekhnicheskii institut (Leningrad Polytechnical Institute) so as to profit from their experience.

ASSOCIATION: Ural'skiy politekhnicheskii institut imeni S.M. Kirova (Ural Polytechnical Institute imeni S. M. Kirov)

Card 1/1

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

2ND AND 4TH ORDERS

SHAPATINA, Ye. A.

CA

Heat exchange in a powder warmed by a hot gas current. O. A. Tunkhanova and E. A. Shapatina. *Bull. acad. sci. U.R.S.S., Class sci. tech.* 1948, No. 7, 82-72.

Heat exchange between a hot-air current and piles of steel balls, brushy pieces, and Cu cylinders is investigated. B. C. F. Ah

COMMON ELEMENTS

COMMON VARIABLES INDEX

OPEN

MATERIALS INDEX

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

FROM SOURCE

6-17-1948

FROM SOURCE

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

SHAPATINA, YE. A., CHUKHANOV, Z. F.

Corresponding Members, Academy of Sciences USSR. (-1944-)

Power Eng. Inst., Academy of Sciences, USSR. (-1944-)

"Dynamics of Low-Temperature Carbonization Process of Solid Fuel. Report 1."
Nos. 7-8, 1945. Iz. Ak. Nauk. SSSR. Otdel. Tekh. Nauk.

SHAPATINA, Ye. A.

PA

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" Dynamics of the process of low-temperature carbonization of solid fuel. II. Heat transfer to layers of nonspherical nonuniform particles. Z. P. Chukhanov and Ye. A. Shapatin. *Bull. acad. sci. U.R.S.S., Class sci. tech.* 1946, 505-14. --An exptl. investigation of the rate of heating of a bed of particles by a hot gas. C. and S. find that the time-response curve of the outlet-gas temp., starting with a cold bed, is not significantly affected by the cond. or specific heat of the bed solids in the range investigated. Bed heights were varied from 10 to 125 mm. Results for nonspherical particles are correlated by using an equiv. diam. of a sphere such that the surface per unit vol. of bed is the same for the spherical particles as for the bed under consideration. Heat transfer to beds of nonuniform, nonspherical particles follows the equation: $Nu = 0.24 Re^{0.4}$, which was deduced for spherical particles provided this equiv. diam. is used. H. I. Kaudiner

ASB-31A METALLURGICAL LITERATURE CLASSIFICATION

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

SHAPATINA, Ye. A.

PA 175T91

USSR/Physics - Heat Exchange

21 May 50

"Transfer of Heat and Matter in a Gaseous Current in a Layer of Solid Particles," Ye. A. Shapatina, V. V. Kalyuzhnyi

"Dok Ak Nauk SSSR," Vol LXXII, No 3, pp 503-506

Discusses graphical and empirical relations between ratio Nu/Re (Nusselt/Reynold) and Re , in connection with "layer combustion," "gasification" of solid fuels, "thermic processing, drying of fine fuel particles by gaseous heat-carriers, etc. Det so-called coeff of heat-exchange alpha. Submitted 23 Mar 50 by Acad M. V. Kirpichev.

175T91

SHAFATINA, YE. A.

PA 163T10

USSR/Fuels - Coal
Coking

Jun 50

"Speed of Separation of Volatile Substances in Thermal Decomposition of Organic Fuel Masses," Ye. A. Shapatina, V. V. Kaluzhnyy, Z. F. Chukhanov, Corr Mem, Acad Sci USSR

"Dok Ak Nauk SSSR" Vol LXXII, No 5, pp 869-872

Demonstrates theoretical possibility and technical desirability of separating in time and space the processes of heating and of physicochemical decomposition which influence semicoking, medium-temperature processing, and coking of solid fuels.

163T10

USSR/Fuels - Coal
(Contd)

Jun 50

Describes experiments on speed of removal of volatiles and determination of degree of fuel decomposition. Plots percentages (0 - 70%) of escaping volatiles and maximum quantity of volatiles yielded at 8500 C vs temperature (200-6000 C) of "coking" coal, for various reaction times (0.8 - 30 sec; 2 hr) and for various coals (Moscow, Cherepovsk), also versus reaction time, etc. Submitted 23 Mar 50.

163T10

Shapalima Ye A.

NAME I BOOK EXCERPTS 007/2407

Abstracts book 8801. Energeticheskiy Institut In. O.K. Khabibovskaya
Problems of Power Engineering; Abstracts of the 10th International
Scientific Conference on Power Engineering; Collection of Articles Dedicated to the
2500th Anniversary of Moscow, 1979. 521 p. Extra 11p insert.

Ed. of Publishing House: B.D. Anan'ev, P.V. Dubov, P.I. Zolov, and
A.K. Kozlov; Tech. Ed.: Z.A. Prokhorov; Editorial Board: A.V. Yul'ev,
A.M. Zolotarev (Deceased), V.I. Kuznetsov (Deceased), V.I. Kuznetsov,
E.I. Chukhrov, K.B. Bugdanov, V.I. Yegor, A.G. Ponomarev, Corresponding Member,
Candidate of Technical Sciences, Candidate of Physical Sciences, D.K. Kozlov,
and I.I. Gushakov.

FOREWORD: This collection of articles is intended as a tribute to the memory
of Academician O.K. Khabibovskiy.

CONTENTS: The collection contains sixty articles by former students and
colleagues of the deceased Academician. The articles deal with problems
of a wide range of subjects in the field of power engineering: problems
of the regional development of electrical and thermal power engineering;
power engineering technology and the physics of combustion. No personal titles
are mentioned. References are given where appropriate.

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KASHURICHEV, A.P.; SHAPATINA, Ye.A.

Investigation of the thermal processing of Baltic oil shale in
an intermittent pilot plant. *Energotekh.ispol!.topl. no.1:149-170*
'60. (MIRA 13:10)

(Oil shale—Thermal properties)

SHAPATINA, Ye.A.; KALYUZHENYY, V.V.

Study of the thermal decomposition of Moscow Basin coal subjected
to a high -rate heating. Energotekh.ispol'.topl. no.1:53-59 '60.
(MIRA 13:10)

(Coal research)

SHAPATINA, Ye.A.

Rate of evolution of volatile substances in the thermal decomposition of Cherekhovo coals. Energotekh.ispol'.topl. no.1:60-67
'60. (MIRA 13:10)

(Coal research)

SHAPATINA, Ye.A.; KASHURICHEV, A. P.; KOVYAZINA, L. A.

Thermal decomposition of peat and oil shale heated by means
of a solid heat-carrying agent. Energotekh.ispol'.topl. no.1:171-
201 '60. (MIRA 13:10)

(Peat--Thermal properties)

(Oil shale--Thermal properties)

SHAPATINA, Ye.A. (Moskva); ORLOVA, M.A. (Moskva)

Experimental equipment for solid fuel decomposition by high-speed heating. Izv. AN SSSR. Otd. tekhn. nauk. Met. i topl. no.2:152-160 K-Ap '62. (MIRA 15:4)

(Peat)

SHAPATINA, Ye. A.; MALASHENKO, L. P.; ORLOVA, M. A.; EDEMSKAYA, N. D.;
AVGUSHEVICH, I. V.

Thermal decomposition of peat under conditions of high-speed
heating. Trudy IGI 17:3-20 '62. (MIRA 15:10)

(Peat gasification)

MALASHENKO, L. P.; SHAPATINA, Ye. A.; EDEMSKAYA, N. D.; ORLOVA, M. A.

Semicoking of peat under conditions of high-speed heating.
Trudy IGI 17:21-33 '62. (MIRA 15:10)

(Peat) (Carbonization)

TEMKIN, M.I.; MOROZOV, N.M.; SHAPATINA, Ye.N.

Ammonia synthesis when moving off equilibrium. Part 2.
Kin.i kat. 4 no.2:260-269 Mr-Apr '63.

(MIRA 16:5)

1. Fiziko-khimicheskiy institut imeni L.Ya.Karpova.
(Ammonia) (Iron catalysts)
(Phase rule and equilibrium)

TEMKIN, M.I.; MOROZOV, N.M.; SHAPATINA, Ye.N.

Kinetics of ammonia synthesis reaction carried away from equilibrium. Kin. i kat. 4 no.4:565-573 JI-Ag '63. (MIRA 16:11)

1. Fiziko-khimicheskiy institut imeni L.Ya.Karpova.

SHAPVALOV, A.

TECHNOLOGY

periodicals: *TEKHNIKA* Vol. 13, no. 10, Oct. 1958

SHAPVALOV, A. Use of oxygen-enriched blast in blast furnaces of the USSR and future prospects. Tr. from the Russian. p. 872

Monthly List of East European Accessions (HEAT) LC Vol. 8, No 5
May 1959, Unclass.

L 28051-66

ACC NR: AP6018173

SOURCE CODE: UR/0239/65/051/006/0670/0680

AUTHOR: Shapavalov, A. I.; Arushanyan, E. B.

27
B

ORG: Institute of Evolutionary Physiology and Biochemistry im. I. M. Sechenov,
AN SSSR, Leningrad (Institut evolyutsionnoy fiziologii i biokhimi AN SSSR)

TITLE: Effects of stimulation of the brain stem and motor cortex on the activity of spinal neurons

22

SOURCE: Fiziologicheskiy zhurnal, v. 51, no. 6, 1965, 670-680

TOPIC TAGS: neuron, brain, neurophysiology, electrophysiology

ABSTRACT: The activity of spinal motor neurons of the 7th lumbar segment upon irritation of various regions of the bulbar division of the medulla oblongata, the pons varolii, and the motor cortex was studied in experiments on cats. Cell potentials of the neurons were determined by methods described in earlier work by Shapovalov. Inhibition of the Activity of motor neurons generally took place against the background of hyperpolarization, while activation (development of action potentials) was associated with depolarization. Under the effect of strychnine, inhibition accompanying hyperpolarization of the neurons was weakened, whereas corazole stimulated release (activation) reactions of supersegmented structures without reducing inhibition effects on neurons.

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Orig. art. has: 1 table and 6 figures. JPRS
Card 1/1, SUB CODE: 06/ SUBM DATE: 22Jan64/ ORIG REF: 005/ OTH REF: 022 UDC: 612.832

SHAPAVALOV, G. A.

PA 23T55

USSR/Engineering
Boilers
Water Systems

Nov/Dec 1947

"Slime Separators Inside Boilers," G. A. Shapavalov,
"Leninskaya Kuznitsa" Factory in Kiev, 1 p

"Promyahlennaya Energetika" No 11/12

The author describes a type of boiler which has equipment inside to separate the water from the slime which accumulates in the boiler. Diagram of boiler is in the article. This method permits continuous cleaning of foreign material from the water in a boiler.

23T55

SOV/137-58-11-21878

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 11, p 5 (USSR)

AUTHORS: Pol'kin, S. I., Bykov, Yu. A., Shapavalov, G. M.

TITLE: On the Flotation of Pyrochlore and Zircon (K voprosu flotatsii pirokhloro i tsirkona)

PERIODICAL: Izv. vyssh. uchebn. zavedeniy, Tsvetnaya metallurgiya, 1958, Nr 1, pp 48-59

ABSTRACT: A study is made of the flotation properties of pyrochlore, zircon, and other minerals entering into the make-up of the concentration-resistant-pyrochlore-zirconium ores. Various collectors, different pH values of the medium, and prior caustic and acid treatment were employed. The pH limits at which the best floatability of various minerals is attained with various collectors are established. This substantiates the fact that it is theoretically possible to separate them selectively. Pre-treatment with caustic or acid facilitates selective flotation. Radioactive isotopes are used to reveal the influence of the presence of various soluble salts upon flotation. This is of particular significance in the flotation of gravitation tailings. Methods of regulating the composition of the medium are

Card 1/2

SOV/137-58-11-21878

On the Flotation of Pyrochlore and Zircon

presented. Flowsheets and reactant regimens for selective flotation of concentration-resistant, finely disseminated, pyrochlore-zircon ores and gravitation slimes, capable of yielding quality products, are presented. Thus, in the flotation of an ore containing 0.08% Nb_2O_5 and 0.37% ZrO_2 , concentrates were obtained with 7.2% Nb_2O_5 and 20% ZrO_2 , recovery being 73 and 90%, respectively. This procedure makes it possible to separate the following concentrates as well: Pure feldspar (satisfactory for the ceramics industry), feldspar-aegirite-augite, sulfide, calcite; and apatite.

B. L.

Card 2/2

KROL', E.G., inzh.; KHOKHLOVA, A.N., inzh.; BEGLYAROV, S.A., inzh.,
rukovoditel' raboty; IGNATYUK, G.L., glavnyy red.; KAGAN, G.S.,
zamestitel' glavnogo red.; GANKIN, M.Z., red.; DEVILLERS, B.P.,
red.; ZHEREBTSOV, V.V., red.; ZHUKOV, G.A., red.; KREMER, Ye.S.,
red.; OFFENGENDEN, S.R., red.; PAVLOV, Ye.L., red.; PETROVSKAYA,
I.V., red.; FAYNTSIMMER, V.M., red.; FROG, N.P., red.;
CHERNIKEVICH, L.A., red.; SHAPAYEV, A.M., red.

[Special operating conditions of irrigation pumping stations.]
Spetsial'nye rezhimy orositel'nykh nasosnykh stantsii. Moskva,
Giprovodkhoz, 1964. 136 p. (Moscow. Vsesoiuznyi proektno-
izyskatel'skii i nauchno-issledovatel'skii institut Giprovod-
khoz. Trudy, no.27). (MIRA 19:1)

1. Nachal'nik otdela nasosnykh stantsiy Vsesoyuznogo gosudarst-
vennogo proyektno-izyskatel'skogo i nauchno-issledovatel'skogo
instituta vodokhozyaystvennogo stroitel'stva (for Beglyarov).

~~L 36651-65~~ EWT(1)/FOC GW

ACCESSION NR: AR5008854

S/0169/65/000/002/B092/B092

SOURCE: Ref. zh. Geofizika, Abs. 2B616

AUTHOR: Shapayev, V. M.

TITLE: Criteria for the aviation-climatic mapping of areas

CITED SOURCE: Tr. Leningr. gidrometeorol. in-ta, vyp. 19, 1963, 81-83

TOPIC TAGS: aviation meteorology, aviation climatology, meteorological mapping

TRANSLATION: Criteria are proposed for the regionalization of an area on the basis of surface meteorological data collected for aviation purposes. These criteria are dependent on the following factors: 1) boundary conditions of the complex of meteorological elements influencing the take-off and landing of different types of aircraft at a particular airport, 2) probability (t) of occurrence of the mentioned complex of meteorological elements relative to the remaining weather regime in a particular interval of time, 3) intensity of aircraft traffic (F) at airports. By computing t and F it is possible to obtain the criterion of meteorological danger $m_0 = \frac{t}{F}$ hours/aircraft. This criterion indicates what number of aircraft taking off or arriving at an airport in a particular

4
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Card 1/2

L 36651-65

ACCESSION NR: AR5008854

Interval of time (10-days, month, season, year) can encounter conditions corresponding to a particular weather minimum having the probability of occurrence t. N. Davydov.

SUB CODE: ES

ENCL: 00

Card 2/2

SHAPAYEV, A. M.

"Density of Air as a Characteristic of Air Masses in Regions of High and Low Pressure,"
No 4, pp 31-37.
(Meteorologiya i Gidrologiya, No 6 Nov/Dec 1947)

SO: U-3218, 3 Apr 1953

USSR/Meteorology - Thunderstorms May/Jun 48
Forecasting

"Determining the Probability of Formation of Intra-
mass Local Thunderstorms," V. M. Shapayev

"Meteorol i Gidrol" No 3, pp 52-54

From observations made in summers of 1943 and 1944
at a meteorological station in Ryzsan'-Stalinogorsk
region, Shapayev established dependency of emergence
of intramass local thunderstorms upon absolute humid-
ity and air temperature, expressed by $W_t = A - B e +$
 $C e^2$ (W_t is % probability of local thunderstorm for

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USSR/Meteorology - Thunderstorms May/Jun 48
(Contd)

given temperature interval; A, B, C are temperature-
dependent constants; and e is absolute humidity,
mm/Hg). Submitted Jan 47.

162186

SHAPAYEV, V. M.

СННПНУ-1, 1-11

Meteorological Abst.
Vol.4 No. 9
Sept. 1953
Part I
Climatology and
Bioclimatology

49-201	551.58
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Shapaev, V. M., *Vopreki istoricheskoi pravde*. [Contrary to historical truth.] *Vsesoiuznoe Geograficheskoe Obshchestvo, Izvestia*, 84(2):207-211, March/April 1952. refs. **DLC**—LEIGHTLY's article "Climatology since the year 1800," *Amer. Geophys. Union, Trans.*, 30(5):658-672, 1949 (see item 2.11-156, Nov. 1952, *MAB*), is criticized for having neglected the Russian and Soviet contributions to climatology. The author cites Lomonosov's (1753) recognition of the moderating influence of seas upon continental climates; I. S. GEORGI's (1794) study of the climate of St. Petersburg, M. F. SPASKII's (1887) monograph on the climate of Moscow which preceded BLODGETT's work by ten years, the numerous contributions of A. I. VOEIKOV on atmospheric circulation, agricultural climatology, etc. Discusses the "complex climatology" of E. E. FEDOROV, B. P. ALISOV's classification of climate based upon weather types and thermodynamic processes in air masses (1936), L. S. BERG's (1924), P. I. BROUNOV's (1904) climatic classifications and the investigation of Russian paleoclimatologists, and criticizes various definitions of climatology proposed by non-Soviet climatologists. *Subject Headings: 1. Climatology 2. Critical reviews 3. U.S.S.R.—I.L.D.*

SHAPAYEV, V.M.

Intrazonal climatic boundaries in the U.S.S.R. Meteor. i gidrol.
no.5:8-18 My '56. (MIRA 9:8)

(Climatology)

SHAPAYEV, V.M.

Prevalent wind directions on the eastern coast of the Taymyr Peninsula.
Probl.Arkt. no.3:41-46 '58. (MIRA 12:1)
(Taymyr Peninsula--Winds)

SHAPAYEV, V.M.

Relation between the bora and forms of atmospheric circulation
on the eastern shore of Novaya Zemlya. Probl.Arkt. no.4:39-44
'58. (MIRA 11:12)

(Novaya Zemlya--Bora)

SOV/169-59-6-6088

Translation from: Referativnyy zhurnal, Geofizika, 1959, Nr 6, p 98 (USSR)

AUTHOR: Shapayev, V.M.

TITLE: Orographic Winds as a Criterion for Characterizing the Local Weather ✓

PERIODICAL: Tr. Leningr. gidrometeorol. in-ta, 1958, Nr 8, pp 69 - 94

ABSTRACT: The orographic constitution and the nonuniformity of the surface which disturb the air streams, produce orographic winds characteristic for the local weather. The investigation of winds at 10 coastal meteorological stations on the Karskoye Sea has shown that each wind direction is characterized by a definite complex of values of other meteorological elements: temperature, humidity and cloudiness. The local influences on the quantitative relationship of the meteorological elements are especially pronounced in winter. The severeness of the weather, determined from the Bodman formula, confirmed the

✓B

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SOV/169-59-6-6088

Orographic Winds as a Criterion for Characterizing the Local Weather

variability of the velocity range of wind and temperature for predominant local winds: the fluctuations of the severeness of the weather for one and the same wind can be observed not only at different places but also at one and the same station. Bibl. 11 titles.

L.V. Klimenko

✓B

Card 2/2

3(7)

AUTHOR:

Shapayev, V. M.

SOV/50-58-12-7/20

TITLE:

On the Frequency of Wind Velocities on the Arctic Islands in the Course of 24 Hours (O sutochnom khode povtoryayemosti napravleniy vetra na arkticheskikh ostrovakh)

PERIODICAL:

Meteorologiya i gidrologiya, 1958, Nr 12, pp 32-33 (USSR)

ABSTRACT:

Observations carried out in the Arctic (Refs 1,2) have shown that the direction of the wind is somewhat changed in the course of 24 hours. This was determined to be a deviation from the average resulting of the wind in the course of 24 hours. The change of direction mentioned has a small amplitude and becomes manifest most distinctly in the case of winds with a west-east component. During the dark season the 24 hour course of the wind is obviously due to the fluctuations of atmospheric pressure, in summer it is probably due to convective air currents. In the investigation of the changes mentioned the author referred to the observations made by 12 polar stations. The analysis has shown that the 24 hour course of the frequency of the wind direction is either lacking or has minor fluctuations in the form of a 12 hour wave (polusutochnaya volna) with a climax at different hours: at 07 and 19, 01 and 13 hours. This proves that

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On the Frequency of Wind Velocities on the Arctic
Islands in the Course of 24 Hours

SOV/50-58-12-7/20

if wind conditions are not influenced by thermal factors small 24 hour fluctuations of wind take place exclusively due to the change of atmospheric pressure within this period. Conditions are different in summer. Although also in summer no distinctly marked day and night fluctuations of the frequency of the selected directions of wind can be observed on the arctic islands, certain fluctuations of the frequency occur in the course of day and night. They can be divided into 2 groups: 1) Air currents at the inlet and outlet of straits. The maximum of the frequency of such directions of wind is attained by night (01 and 07 hours), the minimum in the evening (at 18 hours). This is explained by the example of the Matochkin Shar (Novaya Zemlya) straits: Decrease of the frequency of the easterly and westerly wind as a result of the different total radiation of the earth surface by night. 2) Air currents blowing from the sea towards the mainland. Their maximum is attained at noon (13 hours), the minimum by night. They can be explained by the difference of thermal conditions on the mainland and the sea. Thus, the frequency in some cases is changed in a way that reminds of breeze circulation. There are 2 Soviet references.

Card 2/2

ШАПОВАЕВ В.М.

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PHASE I BOOK EXPLOITATION 807/5606

Nauchnykh konferentsiy po problema meteorologii Antarktiki, Moscow, 1959
 Tezisy dokladov (Theses of Reports at the Scientific Conference on Meteorological Problems in Antarctica, Moscow, 1959) Moscow, Gidrometeoizdat (Mid-naly) 1959. 47 p. 1,000 copies printed.

Ed.: O.G. Krizhchak; Tech. Ed.: I.M. Zarkh.

PURPOSE: The publication is intended for meteorologists, particularly for those interested in the climatology of Antarctica.

COVERAGE: This book contains summaries of thirty-five reports presented at the Scientific Conference on Meteorological Problems in Antarctica held in Moscow, October 26 to 28, 1959. The summaries are arranged in four groups: (1) general problems of the geography of Antarctica; (2) atmospheric circulation; (3) radiation balance, heat balance, climate and special features of individual elements; (4) methods of observation and measurement. No personalities are mentioned. There are no references.

PART I. GENERAL GEOGRAPHICAL PROBLEMS

- 1 Pugov, V.A. [Candidate of Physics and Mathematics, Tsentrallyy Institut Prognozov (Central Forecasting Institute)] and Ye. Zhilikhin [Candidate of Geographical Sciences, Glavnoye upravleniye Severnogo morskogo puti (Main Administration of the Northern Sea Route)] Main Beliefs Features of Eastern Antarctica 5
- 2 Medel', Yu.M. [Candidate of Geographical Sciences, Institute Geografii AN SSSR (Main Administration of Geography, AN USSR)] and A.Y. Zhukovskiy [Candidate of Geographical Sciences, Glavnoye upravleniye Severnogo morskogo puti (Main Administration of the Northern Sea Route)] Antarctic Icecap, its Thickness and the Matter of Underlying Rock 5

PART II. ATMOSPHERIC CIRCULATION

- 3 Tauber, G.M. [Doctor of Geographical Sciences, Gosudarstvennyy okeanograficheskiy Institut (State Oceanographic Institute)] Climatic Cyclone in the Western Part of the Indian Sector of Antarctica 9
- 4 Quarr, A.M. [Professor, Doctor of Physics and Mathematics, Institut fizikoledovogo fiziki AN SSSR (Institute of Applied Geophysics, AN USSR)] Theoretical Diagram of Air Circulation Over Antarctica 9
- 5 Danov, S.P. [Professor, Doctor of Geographical Sciences, Moscow State University (Moscow State University)] Special Features of Summer Circulation and Winter in the Antarctic Waters According to Observations From the "Ob" in 1956-1957 9
- 6 Krizhchak, O.G. [Candidate of Geographical Sciences, Tsentrallyy Institut Prognozov (Central Forecasting Institute)] Atmospheric Circulation in Antarctica and the Southern Hemisphere 10
- 7 Gaydov, S.S. [Candidate of Geographical Sciences, Tsentrallyy aerologii-lichnyy observatoriya (Central Aerological Observatory)] Some Special Features of Circulation and Structure of the Atmosphere in Antarctica and the Central Arctic 11
- 8 Tolstikov, Ye. I. [Main Administration of the Northern Sea Route] Air Masses in Eastern Antarctica 12
- 9 Atabekov, P.D. [Docent, Candidate of Geographical Sciences, Leningradskiy gidrometeorologicheskiy Institut (Leningrad Hydro-Meteorological Institute)] Development of Synoptic Processes Over Western Antarctica 13
- 10 Pogoyan, Kh.P. [Professor, Doctor of Geographical Sciences, Tsentrallyy Institut Prognozov (Central Forecasting Institute)] Special Features of the Temperature at High Altitudes and of Atmospheric Circulation in Antarctica 15
- 11 Gruz, G.V. [Spetsialistyetskiy nauchnoy laboratoriyi gidrometeorologii-lichnyy observatoriya (Special Meteorological Research Institute of Central Asia)] Problems of Studying Planetary Circulation by Means of Perturbation Characteristics 15
- 12 Shapovayev, V.M. [Professor, Doctor of Geographical Sciences, Leningradskiy gidrometeorologicheskiy Institut (Leningrad Hydro-Meteorological Institute)] Some Special Features of the Regeneration of Cyclones on the Antarctic Peninsula 19

SHAPAYEV, V.M., doktor geograf. nauk

Synoptic investigations during the Third Antarctic Marine Expedition
in 1957/58. Inform. biul. Sov. antark. eksp. no.4:23-26 '59.
(MIRA 12:11)

1.Leningradskiy gidrometeorologicheskij institut.
(Antarctic regions--Meteorology)

SHAPAYEV, V.M., doktor geograf. nauk

Weather characteristics in the region of Balleny Islands during the storm of March 29-30, 1958. Inform. biul. Sov. antark. eksp. no.9: 28-30 '59 (MIRA 13:3)

1. Leningradskiy gidrometeorologicheskiy institut.
(Balleny Islands--Cyclones)

SHAPAYEV, V.M.

Vertical and horizontal distribution of the effect of local
relief on the wind regimen in the shore area of the Laptev
Sea. Trudy OGMI no.19:49-63 '59. (MIRA 13:5)
(Laptev Sea region--Winds)

SHAPAYEV, V.M.

Local characteristics of synoptic processes in the region of
Baydarata Bay (southern part of the Kara Sea). Trudy OGMI
no.19:65-74 '59. (MIRA 13:5)
(Baydarata Bay region--Meteorology)

PRIK, Z.M.; SHAPAYEV, V.M.

Effect of ice conditions in the sea on fluctuations of meteorological
elements. Trudy ANII 217:65-86 '59. (MIRA 13:2)
(Kara Sea--Meteorology) (Ice on rivers, lakes, etc.)

80517

SOV/169-60-1-652

Referativnyy zhurnal, Geofizika, 1960, Nr 1, pp 85 - 86

3.5000
Translation from:
(USSR)

AUTHOR: Shapayev, V.M.

TITLE: Fundamental Data on the Local Distortions of the ^{V2} ^{V2c} Wind and the Representativeness of the Meteorologic Stations in the Soviet Arctic

PERIODICAL: Tr. Arkt. n.-i. in-ta, 1959, Vol 217, pp 87 - 98

ABSTRACT: A generalization of the results from a series of works of the author is presented, which deal with the investigation of the possibility of utilizing the materials from observations of the polar stations for characterizing the wind conditions in open sea. Having compared the average seasonal roses of frequency of wind directions for 66 polar stations with the direction of the air currents resulting from the average seasonal pressure fields, the author studied the causes of discrepancy of these directions. The air currents are distorted under the effect of the local relief. In the regions of the Baydaratskaya inlet

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SOV/169-60-1-652

Fundamental Data on the Local Distortions of the Wind and the Representativeness of the Meteorologic Stations in the Soviet Arctic

and Kalymskiy bay, the distortions of the air currents are manifested in local cyclonic circulation and local cyclogenesis near the ground or in the sharpening of the present troposphere fronts. In Novaya Zemlya and in individual coastal zones of the seas: Karskoye, Laptevykh, Vostochno-Sibirskoye, and Chukotskoye, in connection with the presence of mountain ranges, the distortion of the air currents proceeds in vertical and horizontal directions, sometimes accompanied by foehn phenomena and accelerations attaining the forces of storm. In gulfs of the fiord type, distortions of the air currents take place resulting from the topographic effect of the coastal strip merely. The wind currents sharply deviate from their initial direction, and zones of air currents along the coast arise. The upper limits of distortions of the air currents for individual seasons and the dimensions of the areas over which these distortions extend, both to the side of sea and to the side of land, are determined for 18 polar stations, which carry out aerologic observations. The coastal stations do not show, in the majority of cases, the wind behavior under the conditions of open sea. The wind behavior was compared in the individual stations with the distribution of wind

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SOV/169-60-1-652

Fundamental Data on the Local Distortions of the Wind and the Representativeness of the Meteorologic Stations in the Soviet Arctic

beyond the layer of disturbance or with the behavior in such stations, where the influence of the local conditions is fully absent. Deviations of the frequency values of wind specific directions from the normal distribution are determined for eight bearings by the comparison. Summarizing the absolute values of these deviations for each of the eight directions and subtracting this sum from the normal distribution of frequency of the wind directions, the author obtained the so-called coefficient of representativeness of the station in question in percent. The coefficient of representativeness is equal to 100% for 6 stations of 40 coastal stations of the Soviet Arctic and exceeds 84% for 4 stations during individual seasons.

A.A. Sintsov

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Card 3/3

KOPANEV, Ivan Dmitriyevich; SHAPAYEV, V.M., otv.red.; PROTOPOPOV, V.S.,
red.; SERGEYEV, A.N., tekhn.red.

[The Antarctic snow cover] Snezhnyi pokrov Antarktidy. Lenin-
grad, Gidrometeor.izd-vo, 1960. 142 p. (MIRA 13:8)
(Antarctic regions--Snow)

Shupayev, V. M.

PHASE I BOOK EXPLOITATION

SOV/4192
SOV/2-S-90

Leningrad. Glavnaya geofizicheskaya observatoriya

Voprosy sinopticheskoy klimatologii (Problems in
Synoptic Climatology) Leningrad, Gidrometeoizdat,
1960. 154 p. (Series: Its: Trudy, vyp. 90)
Errata slip inserted. 1,100 copies printed.

Additional Sponsoring Agency: USSR. Glavnoye
upravleniye gidrometeorologicheskoy sluzhby.

Ed. (Title page): O. A. Drozdov, Doctor of Geo-
graphy; Ed. (Inside book): V. S. Protopopov;
Tech. Ed.: M. I. Braynina.

PURPOSE: The publication is intended for meteo-
rologists and climatologists.

COVERAGE: This is a collection of 11 articles
published as No. 90 of the Transactions of the
Main Geophysical Observatory imeni A. I. Voyeykov
Card 1/4

Problems in Synoptic Climatology	SOV/4192
Chzhan Tszi-tszya. Long-Term Change in Some Meteorological Elements and the Frequency of Typhoon over China and Their Connection With the Epochal Transformations of W, C, E Forms	63
Dunayeva, A. V. Relation Between the Diurnal Anomalies of Air Temperature and the Variety of Processes of the Eastern Form of Circulation	79
Dunayeva, A. V. Relation Between the Diurnal Anomalies of Air Temperature and the Variety of Processes of the Western Form of Circulation	87
Vitel's, L. A. Long-Term Changes in the Frequency of Various Forms of Atmospheric Circulation and Their Transformations in Connection With Solar Activity	95
Vitel's, L. A. Solar Calendar of Ultrapolar Processes	116
<u>Shapayev, V. M.</u> Trade-wind Circulation Over the Atlantic Ocean	130
Card 3/4	

SHAPAYEV, V.M., doktor geograf.nauk

A case of cyclone regeneration at the Antarctic front. Inform.
biul. Sov. antark. eksp. no.19:31-34 '60. (MIRA 13:9)

1. Leningradskiy gidrometeorologicheskij institut.
(Antarctic regions--Cyclones)

SHAPAYEV, V.M.

Winter regime of the free atmosphere in the region of the Drake
Passage. Trudy GGO no.113:6-13 '60. (MIRA 14:3)
(Drake Passage region—Meteorology)

S/169/62/000/002/049/072
D228/D304

AUTHOR: Shanavev, V. M.
TITLE: Wind-energy resources of the USSR's islands and Arctic seabord
PERIODICAL: Referativnyy zhurnal, Geofizika, no. 2, 1962, 67; abstract 2B523 (V sb. Probl. Arktiki i Antarktiki, no.7, L., Morsk. transport, 1961, 45-49)

TEXT: An estimate of wind-energy resources was made on the grounds of the data of the observations of 54 meteorologic stations. Calculations showed that the average annual wind-speed for the coast and islands of the Arctic amounts to 6.1 m/sec. Substantial variations in the magnitudes of the mean yearly wind-velocities, which is due to cyclonic activity, are characteristic of the Arctic. The strongest winds are recorded on the shores and islands of the Kara and the Chukotsk Seas. As is shown by the calculations, the overall power of the wind energy amounts to 280.4×10^6 kw. Data on the frequency of average yearly wind-speeds are cited together with



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S/531/61/000/122/001/001
D054/D113

AUTHOR: Shabayev, V. M.

TITLE: The effect of the Kara Sea on lower tropospheric temperature variations

SOURCE: Leningrad, Glavnaya geofizicheskaya observatoriya. Trudy, no. 122, 1961. Voprosy klimatologii, 12-18

TEXT: The effect was studied in the summer-autumn period over the Dickson and Uyedineniya islands. Radiosondes and pilot balloons were employed and data collected over many years used for comparison. The effect occurs in a temperature system of air masses moving meridionally N-S and S-N. It is shown, that over the Kara Sea a transformation of the lower air masses occurs, which is reflected in the vertical temperature distribution. Depending on the state of the sea surface, the effect of the latter on the air temperature is different. Above water it stretches up to 0.2-0.5 km and above ice to 1.0-1.5 km. There are 2 figures and 3 tables.



Card 1/1

SHAPAYEV, V.M.

Breeze circulation on shores of the marginal seas of the
Soviet Arctic. Trudy GGO no.123:79-78 '61. (MIRA 14:8)
(Russia, Northern--Winds)

SHAPAYEV, V.M.

Variability of the temperature and relative humidity of the air
in the coastal water region of eastern Antarctica. Mat.poz.
meteor.i klim. no.1:131-136 '63. (MIRA 17:5)

L 12976-65

ACCESSION NR: AR5008458

S/0264/65/000/002/V016/V017

4/5

SOURCE: Ref. zh. Vozdushnyy transport. Sv. t., Abs. 2V111

AUTHOR: Shapayev, V. M.

TITLE: A criterion for flight weather zoning of localities

CITED SOURCE: Tr. Leningr. gidrometeorol. in-ta, vyp. 19, 1963, 81-83

TOPIC TAGS: flight weather control, airport weather zoning, weather probability calculation, airport traffic planning

TRANSLATION: The author proposes a formula for zoning localities in relation to the characteristics of ground control of flight weather data. The formula relates the following factors: 1) boundary conditions of the weather system affecting the takeoff and landing of aircraft of one or another type at a given airport; 2) the probability (t) of occurrence of the forecast weather system in relation to the residual weather pattern within a defined time period; 3) the intensity of aircraft traffic (F) at airports. Having calculated t and F , one can obtain the weather safety factor $m_0 = \frac{t}{F}$ hr/aircraft. The latter indicates the number

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L 42976-65

ACCESSION NR: AR5008458

of aircraft departing from or approaching an airport within a given time period (ten days, a month, season, or year) which could encounter conditions corresponding to one or another minimum weather pattern with an occurrence probability t.

SUB CODE: ES

ENCL: 00

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SHAPAYEV, V.M.

Interruption of trade-wind circulation in the eastern
Atlantic Ocean. Trudy GGO no.142:3-12 '63. (MIRA 16:7)

(Atlantic Ocean—Trade winds)

SHAPAYEV, V.M.

Atmospheric and wind temperature in the troposphere and lower stratosphere above tropical latitudes of the Pacific Ocean (Southern Hemisphere). Trudy GGO no.142:75-81 '63.

(MIRA 16:7)

(Pacific Ocean--Atmospheric temperature)

SHAPAYEV, V.M.

Weather conditions and synoptic processes in various climatic
zones of the Pacific Ocean (Southern Hemisphere). Trudy GGO
no.142:82-109 '63. (MIRA 16:7)

(Pacific Ocean--Climate)

SHAPAYEV, V.M.

Comparative characteristics of calculation methods for the
determination of the freezing depth of soils. Trudy GGO
no.144:209-221 '63. (MIRA 17:6)

SHAPAYEV, V.M.

Effect of wind on visibility and the lower limit of clouds.
Trudy GGO no.163:104-121 '64 (MIRA 18:1)

SHAPAYEVA, Ye.S.; RUSKA, T.N.; DEVIATKOVA, A.V.; DOLGASHOV, V.I., starshiy nauchnyy sotrudnik; ANTIPIINA, V.I.; ROGOVSKAYA, Ye.G., red.; SERGEYEV, A.N., tekhn.red.

[Agroclimatic reference book on Pskov Province] Agroklimaticheskii spravochnik po Pskovskoi oblasti. Leningrad, Gidrometeor. izd-vo, 1959. 138 p. (MIRA 13:2)

1. Leningrad. Gidrometeorologicheskaya observatoriya. 2. Nachal'nik sektora agrometprognozov Severo-Zapadnogo upravleniya gidromet-sluzhby (for DevyatkoVA). 3. Institut geografii AN SSSR (for Dolgashov).

(Pskov Province--Crops and climate)

SHAPAYEVA, Ye.S., otv.red.; LEBEDEV, I.A., otv.red.; ROGOVSKAYA, Ye.G.,
red.; VOLKOV, N.V., tekhn.red.

[Agroclimatic handbook for the Karelian A.S.S.R.] Agroklimaticheskii
spravochnik po Karel'skoi ASSR. Leningrad, Gidrometeor.izd-vo, 1959.
183 p. (MIRA 13:11)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye gidrometeorologi-
cheskoy sluzhby. Severo-Zapadnoye upravleniye.
(Karelia--Crops and climate)

SHAPBARONOV, L. K.

Practical Diagram for Determining the Angle of List of Sailing Vessels (Prakticheskaya Diagramma dlya Opredeleniya Uglov Krena Parusnovo Sudna). Water Transport Press (VodTransIzdat), Leningrad, 1954. 32 pp. Illustr.

Book D 198267, 24 Jan 55

IGNAT'YEV, A.K., redaktor; LETENKO, V.A., kandidat ekonomicheskikh nauk, redaktor; KORZUH, P.P., kandidat ekonomicheskikh nauk, retsenzent; SHAPCHENKO, A.A., inzhener, retsenzent; POPOVA, S.M., tekhnicheskii redaktor; TIKHONOV, A.Ya., tekhnicheskii redaktor.

[Operational production planning at agricultural machinery (model project)] Operativnoe planirovanie proizvodstva na zavodakh sel'skokhoziaistvennogo mashinostroeniia (tipovoi proekt) Pod red. A.K. Ignat'eva. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit. lit-ry, 1953. 221 p. (MLRa 8:11)

1. Moscow. Tsentral'nyy institut organizatsii truda i mekhanizatsii proizvodstva.
(Agricultural machinery industry)

SHAPCHENKO, A.A.; LETENKO, V.A., kand. ekon. nauk, retsenzent;
ANTIPOV, V.P., ekon., red.; POCHTAREVA, T., red. izd-va;
EL'KIND, V.D., tekhn. red.

[Operational planning in assembly shops]Operativnoe planiro-
vanie v sborochnykh tsekhakh. Izd.2. i dop. Moskva, Mashgiz,
1962. 114 p. (MIRA 15:10)

(Industrial management)
(Assembly-line methods)

SHAPCHENKO, Aleksey Aleksandrovich; METT, G.Ya., red.; PETRUSHEV, I.M.,
red.; GERASIMOVA, Ye.S., tekhn. red.

[Methodology of establishing norms for unfinished production]
Metodika normirovaniia nezavershennogo proizvodstva. Moskva,
Ekonomizdat, 1963. 113 p. (MIRA 16:3)
(Machinery industry—Production standards)

EVENTOVA, M.S.; SHAPCHENKO, N.I.

Oxidation of aromatic hydrocarbons. Oxidation of phenyldibenzyl-
methane and ethyldibenzylmethane. Vest. Mosk. un. Ser. 2: Khim. 16
no.1:71-74 Ja-F '61. (MIRA 14'4)

1. Kafedra khimii nefi Moskovskogo universiteta.
(Propane)

ZAVIDOV, V.I.; FEDOROVA, Z.V.; SHAPCHENKO, N.I.

Investigating the low-sulfur extract oils and the product
of their thermal cracking. Khim. i tekhn. topl. i masel 8
no.9:23-27 S '63. (MIRA 16:11)

ZAVIDOV, V.I.; FELDEROVA, Z.V.; SHAPCHEBKO, N.I.

Coker gas oils as a new source of raw materials for the production of carbon black. Nefteper. i neftekhim. no.5:27-28 '65.
(MIRA 18:7)

1. Volgogradskiy nauchno-issledovatel'skiy institut neftyanoy i gazovoy promyshlennosti.

ZAVIDOV, V.I.; FEDOROVA, Z.V.; SHAPCHENKO, N.I.

Chemical composition of heavy gas oils of delayed coking.
Nefteper. i neftekhim. no.7:13-14 '65. (MIRA 18:12)

1. Volgogradskiy nauchno-issledovatel'skiy institut neftyanoy i gazovoy promyshlennosti.

MEKINHOVA, A.V.; ...; ...; ...; MEKINHOVA, A.V.

... for the promotion of synthetic fatty acids. ... (Slide 18:9)

1. volgogradskiy nauchno-issledovatel'skiy institut neftyanoy i gazovoy promyshlennosti.

SHAPCHITS, A.G., inzh.; ROMASHEVSKIY, V.V., starshiy elektromekhanik

Measurements in PS-4-59 apparatus. Avtom., telem. i sviaz' 6
no.3:42 Mr '62. (MIRA 15:3)

1. Orshanskaya distantziya signalizatsii i svyazi Belorusskoy
dorogi (for Shapchits).
(Railroads--Electronic equipment)

SHAPCHITS, A.G., inzh.; ZALYGINA, M.F., inzh.

People and machines. Avtom., telem. i sviaz. 9 no.1:22-26
Ja '65. (MIRA 18:2)

1. Orshanskaya distantziya (for Shapchits). 2. Otdel svyazi
sluzhby signalizatsii i svyazi Belorusskoy dorogi (for Zalygina).

SHAPENKOV, M.P.
USSR/Chemistry - Plastics

FD-2646

Card 1/1 Pub. 50-11/18

Author : Shapenkov, M. P.

Title : A method for the compression molding of elongated hollow objects

Periodical : Khim. prom. No 3, 161, Apr-May 1955

Abstract : Achieve more even distribution of the plastic and greater uniformity in the wall thickness of the molded article by using ring-shaped blanks. Two figures.

SHAPEN KOV, M.P.

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5(3): 25(2)

Moscow. Dom nauchno-tekhnicheskoy propagandy imeni P. E. Dzerzhinskogo
Plastmassy v mashinostroyeni (Plastics in Machine Building) Moscow, Mashin,
1959. 236 p. Errata slip inserted. 8,000 copies printed.
Sponsoring Agency: Obshchestvo po rasprostraneniyu politicheskikh i nauchnykh
izdaniy NIKHIZ.
M. (Title page): V.K. Zaytsovich, Ed. (Inside book): B.M. Rodkin, Engineer;
Ed. of Publishing House: G.M. Korovnikov, Tech. Ed.: A. F. Dvornikov,
Managing Ed. for Literature: Machine Building and Instrument Making
(Mashgiz); M.V. Pokrovskiy, Engineer.

PURPOSE: This collection of articles is intended for engineers and technicians
in the machine-building industry.

COVERAGE: This collection reviews the progress made by the Soviet Union in the
field of manufacturing new plastic materials and fabricating different plastic-
material articles for use in the machine-building industry. Physicochemical
and dielectric properties of phenolite, decorollite, fluoroplastics, epoxy resins,
polyamides, laminated plastics, and fiberglass plastics are analyzed and their
use in machine building described. Characteristics and composition of adhesive
and bonding agents are given and the technology of the pressing process described.
Methods of coating with plastics and the technology against corrosion are explained,
and metallization of plastics achieved by vacuum evaporation is reviewed, as well as
equipment used for manufacturing and fabricating plastics and articles made of
plastics. Mechanization of certain operations and automatic control of various
processes are discussed. No personalities are mentioned. References accompany
individual articles.

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SHAPENKOV, M.P.

Trend in the design and construction of molds, apparatus,
and equipment for processing plastics. Plast.massy no.4:
48-53 '60. (MIRA 13:7)
(Plastics industry--Equipment and supplies)

SHAPENKOV, M.P.; GLUKHOV, Yo.Ye.

Air offtakes in molds for casting (about N.B.Vidgof and S.M.Rips'
article in the journal "Plasticheskie massy" no.9, 1961). Plast.-
massy no.6:64-65 '62. (MIRA 15:6)
(Plastics--Molding) (Vidgof, N.B.) (Rip, S.M.)

SHAPENKOV, M.P.; SAZONOV, V.D.

Method of adjusting extrusion heads for profiling articles.
Plast.massy no.1:69-71 '63. (MIRA 16:2)
(Extrusion (Plastics))

YUGOSLAVIA/Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour: Ref Zhur-Khim., No 2, 1959, 4714.

Author : Dimitriyevich, B.M., Tadich, Z.D., and Shaper, B.P.

Inst :

Title : The Reactions of the Anhydride of Quinolinic Acid with Amines. II. The Reaction with Dimethylamine. Mechanism of the Reaction for the Production of Coramine.

Orig Pub: Glasnik Khim Drushtva, 22, No 4, 201-206 (1957)
(in Serbo-Croat with a German Summary).

Abstract: The anhydride of quinolinic acid (I acid) reacts with $\text{NH}(\text{C}_2\text{H}_5)_2$ [sic: Cf title] in C_6H_6 at 20° , forming the diethylamide of 3-carboxypicolinic acid (II), mp $148-149^\circ$ (from benzene): methylation of the latter product in ether solution with CH_3N_2

Card : 1/2

YUGOSLAVIA/Organic Chemistry. Synthetic Organic Chemistry.

G

Abs Jour: Ref Zhur-Khim., No 2, 1959, 4714.

converts it to 3-carboethoxypicolinic acid, mp 59° (from petroleum ether) which can also be obtained by the reaction of the acid chloride of the β -monomethyl ester of I with $\text{NH}(\text{C}_2\text{H}_5)_2$. On heating in vacuum to $155-160^{\circ}$, II isomerizes and decarboxylates, giving the diethylamide of nicotinic acid (III acid) (coramine), the structure of which is confirmed by acid hydrolysis to III. The α -monomethyl ester of I on heating with SOCl_2 and treatment of the acid chloride obtained with $\text{NH}(\text{C}_2\text{H}_5)_2$ in ether solution in the presence of $\text{N}(\text{C}_2\text{H}_5)_3$, is converted to the diethylamide of 2-carboethoxynicotinic acid (MP 48°) (from cyclohexane). For Communication I see RZhKhim, 1956, 32500. --
D. Vitkovskiy.

Card : 2/2

33

ROZENBERG, B.F., kand.tekhn.nauk; SHAPERIN, I.L., kand.tekhn.nauk

Small-sized automatic electric packaging machine. Mekh. i avtom.
proizv. 19 no.2:30-33 F '65. (MIRA 18:3)

CHUKHANCY, J. F., SHAPETINA, YE. A.

Corresponding Members, Academy of Sciences, USSR. Power Eng. Institute, im. G. M. Krzhizhanovski, Academy of Sciences, USSR. "Dynamics of Low-Temperature Carbonization Process of Solid Fuel. Report I." Iz. Ak. Nauk SSSR, Otdel. Tekh. Nauk, No. 7-8, 1945.
Submitted 12 Dec 1944.

Report U-1582, 6 Dec. 1951.

SHIGORIN, D.N.; SHAPET'KO, N.N.; SKOLDINOV, A.P.; RYABCHIKOVA, T.S.

Nature of the hydrogen bond in systems with π -electrons and
its effect on the proton magnetic resonance. Dokl. AN SSSR 148
no.5:1141-1144 F '63. (MIRA 16:3)

1. Fiziko-khimicheskiy institut im. L.Ya.Karpova. Predstavleno
akademikom V.A.Karginym.

(Hydrogen bonding)
(Nuclear magnetic resonance and relaxation)

SHAPET'KO, N.N.; SHIGORIN, D.N.; SKOLDINOV, A.P.; RYABCHIKOVA, T.S.; RESHETOVA,
L.N.

Chemical shifts of nuclear magnetic resonance of protons of O--H com-
pounds forming an intramolecular hydrogen bond of the O--H...O type.
Opt. i spektr. 17 no.3:459-461 S '64. (MIRA 17:10)

SHAPET'KO, N.N.

Effect of solvents on chemical shifts of the nuclear magnetic resonance of protons of the O-H group in compounds with a strong intramolecular hydrogen bond of the O-H...O type.
Teoret. i eksper. khim. 1 no.4:541-545 '65. (MIRA 18:10)

1. Nauchno-issledovatel'skiy fiziko-khimicheskiy institut imeni Karpova, Moskva.

SHAPET'KO, N.N.; SHIGORIN, D.N.; SKOLDINOV, A.P.; RYABCHIKOVA, T.S.;
RESHETOVA, L.N.

Chemical shifts of nuclear magnetic resonance of protons and
infrared frequencies of compounds with strong intramolecular
hydrogen bond of the type O - H...O. Zhur. strukt. khim. 6
no.1:155-157 Ja-F '65. (MIRA 18:12)

1. Fiziko-khimicheskiy Institut imeni I.Ya.Karpova. Submitted
August 10, 1964.

SHAPET'KO, N.N.; SERGEYEV, N.M.; PETRIY, O.P.; TALALAYAVA, T.V.; MAKHINA, A.A.

Nuclear magnetic resonance spectra of F^{19} in fluorosilicenes.
Zhur. strukt. khim. 6 no.1:158-159 Ja-F '65.

(MIRA 18:12)

1. Fiziko-khimicheskiy institut imeni L.Ya.Karpova, Submitted
August 10, 1964.

SERGEYEV, N.M.; SHAPETIKO, N.N.; TIMOFEYUK, G.V.

Nuclear magnetic resonance spectra of F¹⁹ in trifluorostyrenes. Zhur.
strukt. khim. 6 no.2:300-302 Mr-Ap '65. (MIRA 18:7)

1. Fiziko-khimicheskiy institut imeni Karpova.

POPOVA, Ye.G.; SHIGORIN, D.N.; SHAPET'KO, N.N.; SKOLDINOV, A.P.; GOU'FER, G.A.

Symmetry of quasi aromatic rings. Zhur.fiz.khim. 39 no.11:2726-
2729 N 165. (MIRA 18:12)

1. Moskovskiy fiziko-khimicheskiy institut imeni L.Ye.Karsova.